

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 17, 1999

TO: G. W. Cunningham, Technical Director
K. Fortenberry, Deputy Technical Director

FROM: D. F. Owen, D. J. Grover, RFETS Site Representatives

SUBJECT: RFETS Activity Report for the Week Ending September 17, 1999

Plutonium Stabilization and Packaging System (PuSPS). A Kaiser-Hill change request to support a split-startup has been approved by DOE-RFFO. This will allow packaging of metal to begin in December 1999, while construction of the stabilization system is being completed. Metal packaging will be stopped in February 2000 to finish the planned modifications on the packaging system which will minimize the potential for contamination on the outer surface of the inner container. After appropriate testing and readiness reviews, the complete PuSPS will begin stabilizing and packaging both oxide and metal in May 2000.

The site reps conducted a walk-through of the PuSPS in Building 371. The construction of the packaging system is nearing completion with only minor punch-list items left to be completed. Outer canisters have completed testing and procurement is now on schedule with 200 containers delivered to date. Ten inner containers have been received and are currently undergoing fit-up and welding tests. The stabilization system construction is ongoing. All but one glovebox has been installed. The remaining glovebox is delayed due to an interference with an existing process pipe. Two of the five planned muffle furnaces have been set in the main stabilization glovebox.

Feedback and Improvement. There was a small leakage or spill of caustic fluid from a piece of piping removed during process pipe removal that was staged for size reduction in the Inner Tent Chamber in Building 771. During the follow-up critique (or "fact-finding meeting"), the major corrective action discussed (prior to questioning by the DOE Facility Rep) was to re-emphasize a "policy" that calls for piping to be size reduced within 24-48 hours after piping removal. There was no discussion of what the governing job hazard analysis (JHA) called for, or whether the safety controls were adequate based on this experience. These observations were discussed with the Building 771 management present during the critique. The governing JHAs and procedures are being revised to address the leakage hazard.

The broader issue of failure to follow basic safety management steps during feedback and improvement evolutions such as these critiques (i.e., revisit applicable hazard analysis and controls) was also raised with DOE and Kaiser-Hill management. Kaiser-Hill indicated that they would develop revised guidance and steps to follow for fact-finding meetings that adequately emphasize the basic safety management functions.

cc: Board Members